

ABSTRACT OF THE DISCLOSURE

The present invention provides for dynamic sealing in a flow control device. In an embodiment, the flow control device comprises a closure sleeve adapted to slide over the tubing hole. The closure sleeve has a front edge having a wave-like surface. One or more seals are mounted downstream of the tubing hole. The one or more seals cooperate in a fluid-tight manner with the closure sleeve. A protective sleeve is mounted in alignment with the closure sleeve and proximate to the one or more seals. The protective sleeve has a top edge adapted for mating engagement with the wave-like surface of the front edge of the closure sleeve. A return mechanism is provided for automatically returning the protective sleeve to a covering position in which the protective sleeve covers the first seal when the first seal is not covered by the closure sleeve.